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A Lawn Without Dandelions

By

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Published by
FOSS DRUG COMPANY
Golden, Colo.

PRICE 50 CENTS

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Preface

The writer has observed for many years the struggle of Mr. Average Citizen against the dandelion; but never became actively engaged in the combat until last spring, when he nonchalantly took an asparagus knife and dug up, as he thought, some of the weeds from his lawn. He also trimmed the corner of the lawn near the sidewalk by shoving a spade under the weeds, and also the grass, cutting them off and carelessly depositing them, flowers and all, just outside the curbing. Then he fatuously planted some grass seed and left for a short trip.

On his return he discovered that he had raised a splendid crop of dandelions, and had destroyed whatever chance the grass had had in its struggle against the weed. He found also that the flowers which had been cut off were turned to seed and blown about where they would do the worst good.

There followed a battle which would merely take up space to describe. Any way, the reader has been all through similar ones, and has, no doubt, been worsted by the weed in a manner similar to that experienced by the writer.

Finally, the scheme mentioned in this booklet was thought out and followed on a patch of the lawn six feet in length by four feet in width with a success that was, and is, a source of inestimable satisfaction.

The reader must remember that the instructions for getting rid of the dandelion could be given in one sentence; but such instructions would not be followed. Therefore the purely teaching method with questions and answers, as given herein, was decided upon for the purpose of giving the reader the exact reason why he could kill forever this pest in his lawn.

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A Lawn Without Dandelions

Since the reader has come into possession of this little pamphlet, we will assume that he is one of those earnest citizens who has dug up, cut down, squirted gasoline on, and otherwise waged relentless warfare against that persistent weed, the dandelion; and that he has observed how year after year this "yellow peril" of the green lawn has laughed at all of his efforts at its eradication. We will also assume that he has blamed this condition on the fact that no organized movement of lawn owners has been made against the pest, and so has decided that he could do nothing individually to free his lawn of this affliction.

Like many things in life it will come to him as a shock to learn that he has been pampering the dandelion, helping it along in life, assisting it in ways it enjoys, and doing in general the very things that make it possible for the dandelion to live and crowd out of existence his much desired blue grass or clover.

In order to prove the truth of the assertions made in the preceding paragraph, we will turn to the Theory of Evolution and make inquiry there relative to the meaning of the phrase "survival of the fittest."

Let us examine a tree in the spring for bugs and worms. After comparing the various kinds we find crawling on the leaves, we discover that nearly all of them are green in color. The question naturally arises, then, as to why the bugs are green. It surely is not because the bugs eat the green leaves, else we should have green cows and green horses.

Turning to a book on natural history we learn that long ago by the laws of variation there were probably bugs of all colors; but the colors other than green, being easily observed by birds, the possessors of those colors became toothsome morsels for the birds, and hence left few if any descendants. The green bugs, on the other hand, were comparatively invisible, escaped the watchful eyes of the birds, and hence left descendants; and since by a natural law the offspring resemble the parents, the green color was transmitted in turn to all descendants.

To repeat in little words: The birds ate the bugs which were of colors other than green, and so these bugs left no descendants with their colors. The green bugs, escaping observation in greater numbers, left descendants of green color. We observe, therefore, that the *green bugs were better able to survive by reason of their green color, and speaking "buggily,"* **are the survival of the fittest.**

It will take some time for the reader, if he has not previously given the subject some thought, to get the theory of evolution to such an extent that he can see a constant struggle for existence going on all about him, *even in his dealings with other men*, with whom he struggles daily, so another illustration will not be out of place.

Take as an example the sage grouse, commonly called sage hen (sub-family Tetraonidœ) of the great American Desert. This bird has the characteristic that the hen is scentless during the brooding period. In this condition a coyote might pass within one foot of the hen sitting quietly in the sage brush, and keen as is the scent of the animal, he would be unaware that this ordinarily strongly scented bird were about.

Thoughtlessly, we might say that this was a wise provision of nature; scientifically we know that in the past there were probably all kinds of sage hens, the scented and the scentless, during the brooding period, *but predatory animals eliminated those which were easily discovered;* these left no descendants, and hence we say that the hens which by variation were scentless during the brooding period were the better fitted to survive, and therefore were **the survival of the fittest.**

Many other examples could be mentioned, in fact, all nature is full of examples; but the foregoing will be ample for the purpose of this pamphlet, namely, to show the reader that he must not do those things that help the dandelion to survive, *if he wishes to kill the weeds in his lawn*, **and keep them from ever coming back.**

Before stating what must be done to kill the weeds, it will be necessary to state two *facts* which have probably escaped the reader's attention, and to mention briefly the battle as it has been fought by Mr. Average Citizen in the past.

(A) *In any struggle for existence, the hardier varieties (other things being equal) will survive, and,*

(B) *In any struggle for existence, youth will always triumph over age.*

Let us examine (A) in order to see what we mean by hardier varieties, and to see how the dandelion is hardier than the grass.

Question. What are the characteristics of the dandelion which enable it to kill the grass?

Answer. The dandelion is hardier primarily because it has the invaluable characteristic of being able quickly to shoot up a flower on a long stem high above the ground, and after the flower has been fertilized by insects, to scatter the seeds broadcast by the aid of a little parachute on each seed adapted to be blown about by the passing winds, *and to do this at two regular times each year*, **and many irregular times.**

Question. How does this help the dandelion to survive?

Answer. By continually having youthful dandelions in process of growth.

Question. Admitting that (B) is correct, how does it effect the struggle of the grass against the dandelion?

Answer. The dandelions being youthful have more strength than the grass which is old, and hence crowd out and finally kill the grass.

Question. Why is the grass old?

Answer. Because the owner of the lawn, in his endeavors to have a well-kept lawn, continually cuts the grass, and so prevents it from going to seed.

Question. Why does this not prevent the dandelion from going to seed?

Answer. Because the dandelion is ever alert trying to scatter seeds, and between cuttings will shoot up a flower and go to seed before the poor man can think to pull it up.

Question. What other peculiar thing will the dandelion do in its endeavors to go to seed?

Answer. If a dandelion flower is cut off of the parent plant, it will go to seed within twenty-four hours.

Question. How can one be sure that the flower of the dandelion will not go to seed?

Answer. Burn the flower.

Question. Does cutting the dandelion retard its growth?

Answer. It does not; it cultivates the weed.

Question. Does a dandelion spread by any other method than that of going to seed?

Answer. Yes, its roots run laterally under the ground and shoots come up at various places along these roots.

Question. What method has the owner of the lawn usually followed in fighting the dandelion?

Answer. He has simply dug up the pest and as a rule has left a bare space in the lawn; and this bare space has been soon filled with another dandelion seed, so that nothing permanent was accomplished.

THE REMEDY

Question. What is the scientific basic method for ridding the lawn of dandelions?

Answer. Fight the weed by the same methods it uses in fighting the grass, or by methods as similar as can be devised.

Question. What is the most essential thing to do?

Answer. Let the grass go to seed.

Question. But that would not give a well-cut lawn?

Answer. Then *buy new seed and scatter it thickly over the lawn in order to grow a thick turf.*

Question. What is the use of the thick turf?

Answer. The thick turf is the secret of getting rid of the dandelions—the thick turf prevents a dandelion seed, *blowing from the yard of a neighbor*, from reaching the ground. Then when the lawn is sprinkled, the dandelion seed sprouts, and having no soil in which to grow, it dries and dies.

Question. The plan of action, then, is to buy new seed from one of the seed houses, artificially reproduce the action of the grass going to seed, and cut the old grass in the usual way?

Answer. Exactly that.

Question. What effect has the new young grass on the old grass?

Answer. It crowds out and kills much of the old grass.

PUTTING THE REMEDY INTO EFFECT

Question. What is the first thing to do in beginning work on the lawn with the object of ridding it of dandelions?

Answer. Measure the lawn and compute the number of square feet in area.

Question. Why is this necessary?

Answer. In order to compute the number of pounds of grass seed required.

Question. What unit size is used in determining the amount of seed required?

Answer. One hundred square feet, called a square. This may be in a rectangle 25 feet long by 4 feet wide, or in a square 10 feet by 10 feet, or in any other combination.

Question. What is to be done if the lawn is very large?

Answer. Employ a surveyor to measure it; tell him accuracy is not desired, and he will give you a "hurry-up" job that will not be very expensive. Often it is possible to compute the number of square feet by examination of a map of the grounds.

Question. How much seed should be scattered on 100 square feet of lawn, or on a square?

Answer. One and one-half pounds to two and one-half pounds of seed to each square. This is more than the amount advised by most seed houses for planting new lawns.

Question. Why is it necessary to use more than seed houses advise?

Answer. Because the writer has actually experimented to see how much is required, and these are the figures he obtained. He found that it is best to scatter such a quantity of seed that a struggle begins at once between the seeds themselves, and hence

only the hardiest survive. The grass from these hardiest seeds therefore is better able to struggle against the dandelion.

Question. Is it well to cover the seed with soil?

Answer. It is not; it is best to place the seed on the ground, agitate the grass with a broom so the seed will reach the ground and not stay on the blades, and then allow the hardier varieties to grow by the natural process of sprouting on the ground. Naturally no weak seeds will survive this treatment, and the resulting growth will be lusty.

Question. After the seed is on the ground, what is to be done?

Answer. Wet it well at once, so it will not blow away, and so it will sprout, and be careful to water each day thereafter.

Question. What is the cost in seed for each 100 square feet of lawn?

Answer. About 60 cents for each 100 square feet of lawn if the seed is bought retail in 10 pound lots. For large amounts of seed, a dealer should be consulted.

Question. Is there anything else that should be done to the lawn?

Answer. Yes, it should be spread over with lawn dressing, fertilizer, *two weeks before seeding, or better* **two weeks after.** If spread on with the seed it has a marked tendency to burn the seed.

Question. What will this cost?

Answer. Bought at retail at about 30 cents for a 10 pound sack (which will cover 200 square feet) the cost would be about 15 cents for each square. For large amounts a dealer should be consulted. Any seed house handles fertilizer, lawn dressing.

Question. Is there anything else that must be done?

Answer. Yes, the dandelions will have to be dug up.

Question. Then it is going to take money and work?

Answer. Most assuredly.

Question. Then how does this method appear as different from the usual scheme of digging up the dandelions?

Answer. It is different in that it will be necessary to dig up the dandelion from a particular spot once only. In other words, it is possible to keep *what you get in advantage over the dandelion*, if you will sow grass so thickly after the digging that another dandelion seed cannot gain a start.

Question. After digging the dandelion, can anything be done at that particular spot to assist in killing the weed?

Answer. One thing can be done to help the entire work, if the owner of the lawn does not object to clover, namely, to drop

much clover seed in the hole and about the hole. This will come up very quickly, and so will prevent the appearance of the dandelion at that spot. It must be remembered that cutting the weed below the ground does not kill it, and so measures must be adopted to stifle the growth.

Question. What can be said in general about the method advocated in this pamphlet for eradicating the dandelion?

Answer. That the task is not one for a boy, or for Mr. Shiftless; but is a job for a "he man" with all his senses alert.

Question. What, then, is the procedure, step by step, for getting the maximum amount of results from the work?

Answer. This will be given below, with the steps numbered.

I

Measure the lawn and find the total number of square feet. Divide this number by 100 by pointing off two decimal places from the right. Multiply this result by a number between 1.5 and 2.5, depending on the thickness of the grass, thus obtaining the number of pounds of seed required.

Also compute the number of pounds of fertilizer required by multiplying the number of squares in area (which was obtained in the preceding paragraph by dividing the total number of square feet by 100) by 5.

Question. Is it possible to get along without the fertilizer?

Answer. In a few cases out of a score. The lawn owner must decide this for himself.

II

Go to a seed store and buy a "dandelion digger" (proper name, asparagus knife), the necessary seed, blue grass, and the fertilizer. Then, if you have no objection to clover in your lawn, buy a few pounds of clover seed as a starter.

III

Select the best place on the lawn to start, and lay out a patch, preferably with two sides on the edge of the lawn, with white string and pegs so that the area does not exceed an amount which the owner of the lawn can clear of dandelions at one onslaught. For the average evening spent at the work, the area should not exceed 40 square feet, or a space rectangular in shape 10 feet by 4 feet. It is obvious that the above is not a fixed rule—it must be varied to suit each case. For example, if the dandelions are very thick the area may be reduced, or if there are not so many of them the area may be increased.

IV

Begin, now, and dig each dandelion, cutting each one off as deeply as possible. After each dandelion is pulled out, push the

soil down firmly to close the hole, and scatter clover seed thickly about the spot. The writer has obtained sure results, after the plant has been cut off, by driving the dandelion root down deep, with a piece of broom handle and a hammer, and then filling in the hole with new soil. Also dig up all other weeds.

V

After the space is clear of dandelions, *cut the grass as close as possible*, and spread the seed uniformly on the ground, brushing the grass with a broom so that all of the seed is sure to reach the soil. Use 1½ to 2½ pounds of seed per square (100 square feet), proportioning for the particular area under treatment.

VI

On the freshly cut face of a stick put the date, and push the stick into the ground, so that if fertilizer is to be used it may be spread two weeks later.

VII

Soak the area well with water; use the spray from the hose so that the seeds will not be washed about.

VIII

Treat a new patch the following day, and one new patch every day thereafter, moving over the lawn in a systematic manner in order, finally, to cover it all.

IX

After you get started and your neighbors come over with tons of free advice, and the doubting Thomases and gentlemen from Missouri (you may inform these that they will be shown in the fall) have had their say; and you begin to feel just a bit doubtful yourself, remember that not one of them can suggest *anything better*. In other words, their criticism will be anything but constructive.

X

Keep the lawn well watered up to the very last day in the fall that this is possible. Then when you decide to do no more watering, have the lawn covered with manure for the winter months. This will make certain that the following summer an ideal lawn will have been made. This covering of manure is necessary because the roots of seeds scattered on top of the ground have a poorer start into the ground than the roots of seeds which are covered with soil, and so have less chance of surviving the winter.

If the lawn is treated as outlined herein, beginning in the spring, the covering of manure is not necessary; but if the treatment is started as late as September, or the latter part of August, then the manure is essential.

Question. *In what circumstances does this method fail?*

Answer. *In the hands of Mr. Shiftless the method is practically certain to fail.* This Mr. Shiftless looks over the pamphlet, and says: "Well, I guess I shall improve on this method; this 'tommy-rot' about small spaces for intensive treatment doesn't get anywhere with me—I'll just scatter plenty of seed and pull the dandelions here and there. I guess it will work all right."

What happens is this: Mr. Shiftless digs dandelions day after day walking over the tender little sprouts of grass, killing great numbers, and retarding the growth of those that are not killed. In the end he has accomplished little as compared with what he could accomplish by the system outlined in this pamphlet. Also, the total work he does will be greater than the amount he would do by being systematic.

Question. *Is there any way Mr. Shiftless can succeed?*

Answer. *Yes, there is one easy way.* It comes about through the fact that Mr. Shiftless usually marries Miss Careful. Therefore, if he will let his wife direct the work and do as she says, the results will approximate perfection.

GENERAL INSTRUCTIONS

After a patch has been treated as mentioned, *it is essential to watch it carefully and pull up any dandelions that may gain a start before the new thick turf is formed.*

Also pull up any other weeds that may gain a start.

Keep the grass cut on the patches treated so that the sunlight will reach the tender sprouts of grass. Do this cutting only after a few weeks, or when it is essential. In other words, give the new seed every possible chance, and above all things **use common sense for new problems as they arise.** *Finally, be sure to cover all bare spots with plenty of grass seed.* **This is most important!**

BEST TIME TO BEGIN

The best time to begin is, of course, in the spring, so the grass which is planted will have the longest possible growing season. In general, it is not advisable to start later than the middle of August, and only then when the manure covering is contemplated.

IMPORTANT!

The average person must hear a song or an instrumental piece several times (even if the piece makes a hit) before he understands it and gets the fullest enjoyment from it. In other words, he has to hear it several times before he understands it; after understanding comes, he enjoys it, and then he says he likes it, and tells all of his friends about it.

For the foregoing fundamental reason *this pamphlet must be read many times, or until it is thoroughly understood.* After it is understood, the reader will enjoy it; and after that he will go out on the lawn, start the work and thoroughly enjoy it—**for victory is certain, if the method is thoroughly understood.**

ABOUT FERTILIZERS

Manure, if it can be obtained free, is cheaper than ordinary fertilizer as sold by the seed houses. If the reader is obliged to buy it, however, he will find that the dry fertilizer as sold by the seed houses is the cheaper. Manure has the disadvantage that it often contains wheat, oats, or other seeds. This disadvantage can be overcome by a little more digging, if the contained seeds germinate. It also has the disadvantage that three months weathering (Ohio Bulletin 246) reduces it as follows: Dry matter, 33.7%; Nitrogen, 35.6%; Phosphoric acid, 22.5%; and Potash, 51.0%. It is therefore not a balanced plant food, unless great care has been exercised to prevent weathering. Unfortunately this precaution is rarely taken.

ABOUT NEW SCHEMES

Question. If the dandelions are very thick, is it ever advisable to dig up the entire lawn?

Answer. In general, **no!** But if the lawn owner has plenty of money to spend, and does not wish to be bothered with any systematic method, then the lawn may be plowed up, the dandelions raked out, and a new lawn sown.

Question. If a new lawn is put in as mentioned in the preceding paragraph, what must be done to keep it free of dandelions?

Answer. Watch it carefully, and keep all bare spaces covered with grass seed; for the bare spaces are the places the dandelions gain a start.

Question. What other new schemes will the reader of this pamphlet probably think about?

Answer. First he will reason that it ought to be possible to kill the dandelions by sowing great quantities of grass and clover seed, letting the dandelions die by the crowding of the new grass, thus saving the digging of the dandelions. The writer tried this on a small patch for a short time without success. Extended over many years it might be partially successful: it is not to be recommended.

Question. Were any other schemes tried?

Answer. Many were tried. On one patch seed was sown thickly and then the leaves of the dandelions were pulled off as they grew, the writer reasoning that if the dandelions were de-

prived of sunlight they would finally die. Under this treatment the dandelions grew big and strong, and finally had to be dug up.

Question. What is the objection to gasoline?

Answer. While it kills the dandelion almost at once, rotting the weed down the stem for as much as eight or ten inches below the ground, it also kills the adjacent grass, and when it falls on the ground it renders the soil unfit for growing anything. Injected into the dandelion, it works well; but it takes more time to inject gasoline into the dandelion (with a hypodermic needle and syringe such as veterinary surgeons use on horses) than it takes to dig up the weed.

Question. Is there any solution than can be sprayed on the lawn which will kill the dandelions and not kill the grass?

Answer. The human race is ever seeking a panacea for all ills, the elixir of life, the fountain of youth, or some other equally futile thing. On examining the progress made in these various searches we discover that none of them are popular if they demand denial, or hard work. That is why the method given in this pamphlet for ridding the lawn of dandelions cannot be as popular as one which works by the simple expedient of squirting a solution over the lawn. However, the method which requires hard work will win; and the writer knows of no solution that will give the desired result, though claim has been made from time to time that such a solution has been discovered.

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